

## METHOD AND DEVICE FOR SYNCHRONIZING FRAME

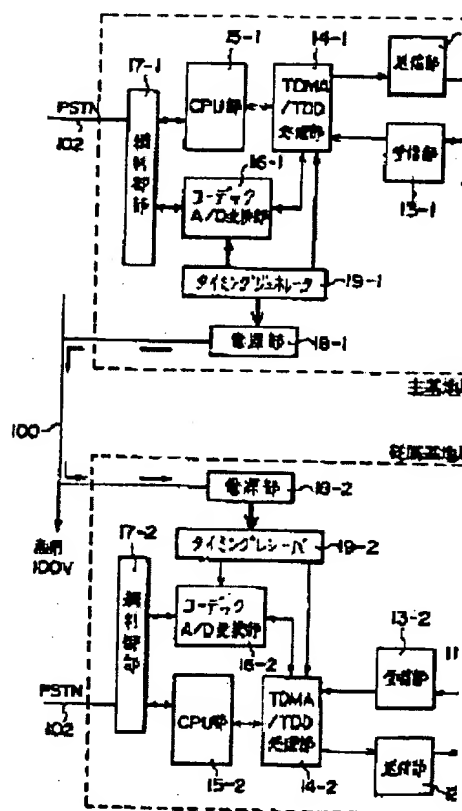
Ref. 2

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## Abstract of JP10145847

**PROBLEM TO BE SOLVED:** To perform phase matching by sending a signal from a master base station to a slave base station by converting control channel transmission timing generated at the master base station to a timing signal, transmitting it to the slave base station and generating control channel transmission timing at the slave base station based on this signal.

**SOLUTION:** A data signal inputted to a network control part 17-1 of a master base station 1 is converted by a CODEC A/D converting part 16-1 and inputted to a TDMA/TDD processing part 14-1. Based on the timing signal from a timing generator 19-1, the TDMA/TDD processing part 14-1 sends the data signal to a transmission part 12-1 and transmits it from an antenna A-1. The data signal inputted to a control part 17-2 of a slave base station 2 is converted by a CODEC A/D converting part 16-2 and inputted to a TDMA/TDD processing part 14-2. Based on the timing signal from a timing receiver 19-2, the TDMA/TDD processing part 14-2 sends the data signal to a transmission part 12-2 and transmits it from an antenna A-2.



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Application Date: November 8, 1996

Applicant: Mitubishi Denki K.K.

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Title of the Invention: Frame Synchronizing Method and Apparatus

Abstract:

Base stations working according to the TDMA/TDD use individual synchronization timings, and therefore synchronization cannot be established among these base stations. Consequently it may be possible that the control channels used by the individual base stations interfere with each other.

The timing signals used in transmission in the control channel in the main base station 1 are sent to an associated base station 2 via the commercial power lines 100, and the base station 2 establishes the timing in transmission in the control channel in the base station 2.

Fig. 1 shows the base station 1 and the dependent base station 2, the power sources 18-1 and 18-2 of which base stations 1 and 2 are connected to each other via the commercial power line 100.

The base station 1 comprises: network control unit 17-1; CPU section 15-1; TDMA/TDA processing section 14-1; transmitter 12-1; antenna switch 11-1; receiver 13-1; codec A/D converter 16-1, timing generator 19-1; and power source 18-1.

The base station 2 comprises: network control unit 17-2; power source 18-2; timing receiver 19-2; codec A/D converter 16-2; TDMA/TDA processing section 14-2; CPU section 15-2; transmitter 12-2; receiver 13-2; and antenna switch 11-2.